The listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended). Apparatus for measuring hemodynamic parameters, especially for Augmentation Index (AIx) and/or Ejection Duration (ED), by non-invasive, cuff based occlusive, blood pressure measurement, which apparatus comprises occlusive, oscillometric automatic blood pressure meter and units, determining the values of hemodynamic parameters, ~~characterised by~~ comprising

an oscillation wave separating and storing signal detector (1), the sampling rate thereof is at least 200/heart cycle; and has ~~an~~ a storage unit (5) resolution thereof is organised at least 9 bit,

~~an~~ a preferably digital[,] anti-filter (8) to compensate the distortions rising at the sampling, separating and digitising the oscillation wave,

an amplitude arithmetic (6) unit establishing the Augmentation Index (AIx);

~~an~~ a synthetic organ (9) unit establishing the Ejection Duration (ED).

2. Apparatus according to claim 1, ~~characterised by, that~~ wherein the sampling rate of the signal detector (1) is 180-220/second.

3. Apparatus according to claim 1 ~~or 2~~, ~~characterised by, that~~ wherein the storage unit (5) storing the signals, generated by the oscillation wave, is organised 10-12 bit.

4. Apparatus according to claim~~s~~ 1~~-3 characterised by, that~~ wherein it is equipped with a time-arithmetic (7) unit establishing the Pulse Wave Velocity (PWV), and/or integrator unit (3) establishing the Systole Area Index (SAI) and Diastole Area Index (DAI).

5. Apparatus according to ~~any of claims 1-4 characterised by, that~~ claim 1, wherein amplitude arithmetic (6), synthetic organ (9), preferably the time-arithmetic (7), and/or integrator unit (3) are joined to a common program controller (26), and compiled to an analyser (2).

6. Apparatus according to ~~any of claims 1-5 characterised by, that~~ claim 1, wherein it is combined with a portable, 24h ambulatory blood pressure monitor.

7. Apparatus according to ~~any of claims 1-5 characterised by, that~~ claim 1, wherein it is incorporated in a telemedical home care system.

8. Apparatus according to ~~any of claims 1-5 characterised by, that~~ claim 1, wherein it is combined with a 24h blood pressure monitor, which is controlled by a build-in ECG.

9. Method for non-invasive measurement of hemodynamic characteristics, especially Augmentation Index (AIx) and/or Ejection Duration (ED), with an occlusive, pressure-sensor cuff, placed on the brachial artery, and with the apparatus according~~ly any of the claims 1-8~~ to claim 1, by sampling, analysing, and evaluation of the signal flow of the oscillations of the pulse waves, ~~characerised by that~~ wherein a usual stepwise blood pressure measurement is performed, and the SBP, DBP and HR values are stored, thereafter the signal distortions rised at the sampling are compensated by an "anti-filter" process, after it the cuff (11) is set over the systolic pressure, i.e. to suprasystolic pressure range, preferably SBP + 35 mmHg pressure, and from the received oscillation curves, on the basis of the wave amplitudes, we calculate the Augmentation Index (AIx); and

on the oscillation curve determining the minimum-point after the first reflex wave, we calculate the Ejection Duration (ED) value.

10. Method according to claim 9, ~~characterised by, that~~ wherein the sampling rate is taken at least 180 samples per second, preferably 200 samples per heart cycle, and the digitised signals flow are stored at least in 9 bit resolution.

11. Method according to ~~claims 9 or 10, characterised by that~~ claim 9, wherein the cuff (11) is set to supra-systolic pressure range, over the systolic pressure, preferably +35 mmHg pressure, from the time shift of the main wave and the first reflex, respectively of the measured sternal notch and pubic bone distance of the patient, are calculated the Pulse Wave Velocity (PMV) value, and/or the cuff (11) is set to the already determined diastolic value or near to this, the received heart cycle curve ~~are~~ is divided to two parts with the ED end-point, and thus are constituted the Systole Area Index (SAI) and Diastole Area Index (DAI) values.